

To: Garwood, Gerri[Garwood.Gerri@epa.gov]
From: Smith, Claudia
Sent: Wed 7/27/2016 9:50:01 PM
Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Many thanks!

Thanks,

Claudia

From: Garwood, Gerri
Sent: Wednesday, July 27, 2016 3:34 PM
To: Smith, Claudia <Smith.Claudia@epa.gov>
Cc: Moore, Bruce <Moore.Bruce@epa.gov>; Beeler, Cindy <Beeler.Cindy@epa.gov>
Subject: FW: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Claudia,

I think this is what you are looking for.

Gerri

919-541-2406

From: Jason Huckaby [<mailto:Jason.Huckaby@erg.com>]
Sent: Thursday, March 03, 2016 10:28 AM
To: Beeler, Cindy <Beeler.Cindy@epa.gov>; Johnson, Steffan <johnson.steffan@epa.gov>;
Mia, Marcia <Mia.Marcia@epa.gov>
Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>

Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Hello again,

A revised table with a DRE column is attached. Marcia, we did not update the revision date on this since it is not the "official" version posted on the website.

Thanks, and again, let me know if you have any questions or comments.

Jason

Jason M. Huckaby

Sr. Chemical Engineer

Eastern Research Group

(919) 468-7826

From: Jason Huckaby

Sent: Thursday, March 03, 2016 10:06 AM

To: 'Beeler, Cindy' <Beeler.Cindy@epa.gov>; Johnson, Steffan <johnson.steffan@epa.gov>;
Mia, Marcia <Mia.Marcia@epa.gov>

Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>

Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Hello all,

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Also note that Abutec and NOV are the same manufacturer. Abutec is the manufacturer, but they indicated that these units would also be marketed under the NOV name as well.

Thanks, and let me know if you have any questions. I'll send along the table shortly.

Jason

Jason M. Huckaby

Sr. Chemical Engineer

Eastern Research Group

(919) 468-7826

From: Beeler, Cindy [<mailto:Beeler.Cindy@epa.gov>]

Sent: Thursday, March 03, 2016 9:28 AM

To: Johnson, Steffan <johnson.steffan@epa.gov>; Jason Huckaby <Jason.Huckaby@erg.com>;
Mia, Marcia <Mia.Marcia@epa.gov>

Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>

Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Mind like a steel trap! Thanks, Steffan.

Cindy Beeler

US EPA Region 8, Energy Advisor
Office of the Regional Administrator
Tel: 303-312-6204
Beeler.Cindy@epa.gov

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From: Johnson, Steffan
Sent: Thursday, March 03, 2016 5:40 AM
To: Jason Huckaby <Jason.Huckaby@erg.com>; Beeler, Cindy <Beeler.Cindy@epa.gov>; Mia, Marcia <Mia.Marcia@epa.gov>
Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>
Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

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Perhaps that is helpful...

Stef

From: Jason Huckaby [<mailto:Jason.Huckaby@erg.com>]
Sent: Wednesday, March 02, 2016 10:12 PM
To: Beeler, Cindy <Beeler.Cindy@epa.gov>; Mia, Marcia <Mia.Marcia@epa.gov>; Johnson, Steffan <johnson.steffan@epa.gov>
Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>
Subject: Re: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

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Regards,

Jason

Sent on the new Sprint Network

----- Reply message -----

From: "Beeler, Cindy" <Beeler.Cindy@epa.gov>

To: "Mia, Marcia" <Mia.Marcia@epa.gov>, "Johnson, Steffan" <johnson.steffan@epa.gov>

Cc: "Garwood, Gerri" <Garwood.Gerri@epa.gov>, "Jason Huckaby" <Jason.Huckaby@erg.com>

Subject: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Date: Wed, Mar 2, 2016 6:21 PM

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Cindy Beeler

US EPA Region 8, Energy Advisor

Office of the Regional Administrator

Tel: 303-312-6204

Beeler.Cindy@epa.gov

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From: Beeler, Cindy
Sent: Wednesday, March 02, 2016 4:18 PM
To: Mia, Marcia <Mia.Marcia@epa.gov>; Johnson, Steffan <johnson.steffan@epa.gov>
Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>; Jason Huckaby <Jason.Huckaby@erg.com>
Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

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Thanks a TON, Marcia!

Cindy Beeler
US EPA Region 8, Energy Advisor
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Beeler.Cindy@epa.gov

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From: Mia, Marcia
Sent: Wednesday, March 02, 2016 4:17 PM
To: Beeler, Cindy <Beeler.Cindy@epa.gov>; Johnson, Steffan <johnson.steffan@epa.gov>
Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>; Jason Huckaby <Jason.Huckaby@erg.com>
Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

That works for me. Do you need Jason to do anymore looking?

Marcia B Mia

Office of Compliance/Air Branch

2227A WJCS

U.S. Environmental Protection Agency

202-564-7042

From: Beeler, Cindy

Sent: Wednesday, March 02, 2016 6:06 PM

To: Mia, Marcia <Mia.Marcia@epa.gov>; Johnson, Steffan <johnson.steffan@epa.gov>

Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>; Jason Huckaby <Jason.Huckaby@erg.com>

Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Thanks for quick response Marcia (esp. at late hour Back East).

I checked several of the Manufacturer websites of EPA-confirmed models and they are stating the following – some have caveats about proper operation under design conditions:

- ABUTECH – two confirmed models – 99%+ destruction efficiency (Independent 3rd party tested)
- Cimarron – five confirmed models - Demonstrates VOC Destruction Efficiency >99%
- COMM Engineering – one confirmed combustor model - VOC Destruction Efficiency > 99%
- JLCC Combustion – one confirmed model - 99.99% DRE
- NOV – two confirmed models - 98%+ destruction efficiency (Independent 3rd party tested)
- Questor Technology – two confirmed models - Combustion efficiency >99.99%
- REM Technology Spartan Controls – one confirmed model - greater than 99.9% VOC destruction

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How about this footnote:

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Cindy Beeler

US EPA Region 8, Energy Advisor
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Beeler.Cindy@epa.gov

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From: Mia, Marcia

Sent: Wednesday, March 02, 2016 3:45 PM

To: Beeler, Cindy <Beeler.Cindy@epa.gov>; Johnson, Steffan <johnson.steffan@epa.gov>

Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>; Jason Huckaby <Jason.Huckaby@erg.com>

Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Importance: High

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Ex. 5 - Deliberative Process

Marcia B Mia

Office of Compliance/Air Branch

2227A WJCS

U.S. Environmental Protection Agency

202-564-7042

From: Beeler, Cindy

Sent: Wednesday, March 02, 2016 4:53 PM

To: Mia, Marcia <Mia.Marcia@epa.gov>; Johnson, Steffan <johnson.steffan@epa.gov>

Cc: Garwood, Gerri <Garwood.Gerri@epa.gov>

Subject: FW: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Marcia & Stef –

I'm hoping you can help with a relatively quick answer. I understand that you two have been/were the primary reviewers of the majority of Manufacturer performance tests that were cleared and have been listed on our NSPS OOOO site.

Is this an accurate statement we could make as a footnote in our Uintah & Ouray Reservation-specific FIP we are proposing to tackle air quality issues in the Uinta Basin:

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Background – Due to high ozone recorded over the last few years (recent 8-hour average of 120 ppb) in the Uinta Basin in NE Utah, R8 is drafting a reservation-specific

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Cindy Beeler

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From: Garwood, Gerri

Sent: Thursday, February 18, 2016 1:26 PM

To: Smith, Claudia <Smith.Claudia@epa.gov>; Beeler, Cindy <Beeler.Cindy@epa.gov>

Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Ex. 5 - Deliberative Process

Gerri

919-541-2406

From: Smith, Claudia

Sent: Thursday, February 18, 2016 11:31 AM

To: Garwood, Gerri ; Beeler, Cindy

Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Ex. 5 - Deliberative Process

Thanks,

Claudia

From: Garwood, Gerri

Sent: Wednesday, February 17, 2016 3:04 PM

To: Beeler, Cindy <Beeler.Cindy@epa.gov>

Cc: Smith, Claudia <Smith.Claudia@epa.gov>

Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Ex. 5 - Deliberative Process

Gerri

919-541-2406

From: Beeler, Cindy
Sent: Wednesday, February 17, 2016 4:39 PM
To: Garwood, Gerri <Garwood.Gerri@epa.gov>
Cc: Smith, Claudia <Smith.Claudia@epa.gov>
Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

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From: Garwood, Gerri
Sent: Wednesday, February 17, 2016 1:43 PM
To: Beeler, Cindy <Beeler.Cindy@epa.gov>
Cc: Smith, Claudia <Smith.Claudia@epa.gov>
Subject: RE: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Hi Cindy,

Ex. 5 - Deliberative Process

Gerri

919-541-2406

From: Beeler, Cindy
Sent: Tuesday, February 16, 2016 3:54 PM
To: Garwood, Gerri <Garwood.Gerri@epa.gov>
Cc: Smith, Claudia <Smith.Claudia@epa.gov>
Subject: Table of DREs achieved in NSPS OOOO Combustor Manufacturer Performance Test Results

Gerri –

Ex. 5 - Deliberative Process

performance test results DRE for each of the 20-30 Combustion Control Devices listed at:

<http://www3.epa.gov/airquality/oilandgas/pdfs/mantesteddevices.pdf>

Thanks,

Cindy Beeler

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